

### Idaho Department of Fish and Game

Comments, Biological Characteristics section of the TMDL, p 1: The Department of Fish and Game suggested several factual modifications to the portion of the TMDL that describes the biological characteristics of the watershed.

*DEQ will incorporate the suggested changes and additions into the document.*

Comment, Fisheries, Distribution and Presence, p.1: The Department of Fish and Game suggested more direct language to describe the fact that natural reproduction of trout stocks is in sufficient to sustain populations, and the extent of the trout stocking program.

*DEQ will incorporate the suggested change into the document.*

Comment, page 1: DEQ should address habitat improvement in the TMDL.

*Habitat improvements are not allocatable pollutants that can be included in TMDL allocations. However, DEQ supports any efforts that may develop outside of the TMDL to create or improve aquatic habitat within the Boise River or its natural tributaries. DEQ expects that the sediment load allocations in the TMDL will provide some level of benefit to the stream substrate.*

Comment, p. 2: DEQ should address wildlife habitat in the TMDL.

*Like the aquatic habitat improvements, noted in the previous comment, wildlife habitat is not an allocatable pollutant in TMDL allocations.*

**Idaho Power Company**

Comment, p 1, "IPC believes that DEQ's recommendation to reduce suspended sediment levels with no commensurate reduction in levels of biologically available phosphorus risks further degradation of water quality in the Boise River, the Snake River, and Brownlee Reservoir.

*DEQ believes that establishing a firm no net increase requirement for sources of total phosphorus in the lower Boise River Watershed is necessary, and will apply its No Net Increase Rule (IDAPA 16.01.02.054.04 and .05) to the Boise River until appropriate phosphorus load and waste load allocations can be developed for the river. As sediment loads are reduced, phosphorus loads may also decline, since sediment attached phosphorus will be removed.*

Comment, p 1, "Specifically DEQ proposes that high sediment levels are currently limiting algae growth in the Boise River."

*DEQ agrees that sediment is one of the factors that affects productivity in the Boise River, but notes that other factors such as flow velocity and substrate characteristics also affect productivity.*



**ConAgra, Inc. / Armour Fresh Meats, Inc.**

Comment, p. 1, Armour requests that the TMDL note the fact that the company collects water quality data on a regular basis as a part of its NPDES permit.

*DEQ will make that addition to the document.*

Comment, p. 1, Armour requests the addition of "pursuant to NPDES permits." be added to page 54, paragraph 1, line 1 of the Draft Lower Boise River TMDL.

*DEQ will make that addition to the document.*

Comment, p. 1, The flows for the Armour facility listed in Table 15 of the Draft TMDL should be listed as 0.416 MGD on a daily average basis and 0.475 MGD as the design flow.

*Noted and corrected.*

Comment, p. 2, Table 16 in the Draft TMDL contains incorrect information related to Armour's existing total suspended solids loads. The table should include a 1996 annual average flow of 0.354 MGD, a 1996 annual average TSS concentration of 17.9 mg/l, and a 1996 existing TSS load of 0.027 tons per day.

*Noted and corrected.*

Comment, p 2., "Currently only municipalities are provided TSS reserve growth in Table 17. Armour requests an allocation of reserve growth."

*Municipal waste water flows are expected to increase over time as the population of the Treasure Valley grows and sanitary sewer connections increase. Since TSS concentration limits in NPDES permits and the expected growth in municipal flows can be accommodated in the TSS load allocations without exceeding TSS target criteria, reserve TSS loads for municipal effluents is appropriate. Armour must demonstrate a reasonable expectation of significant growth in waste water flow through its treatment system in order to be considered for a reserved TSS load in the TMDL.*

## City of Boise Public Works Department

Comment, p. 2, "...recognition that new bacteria criteria are anticipated in 1999 which would result in a change of reduction goals, monitoring requirements, TMDL targets;"

*DEQ will include language in the TMDL to indicate that the overall goal of the bacteria allocations is to ensure that bacterial counts are within state criteria to protect contact recreation uses of the Boise River. If the state adopts criteria for E. Coli in place of the existing Fecal Coliform criteria, the TMDL bacteria allocations should still protect contact recreation using the new criteria to judge compliance.*

Comment, p. 2, "...high flow off ramp for sediment TMDL and consideration for high flows for other TMDLs or NNI programs;"

*DEQ will not include high flow off-ramps for any of the allocations in the TMDL. The 60 day duration associated with the 50 mg/l suspended sediment target should be sufficient to account for high flow conditions.*

Comment, p. 2, "...monitoring plan in the NNI approach for determination of nonpoint sources with the NNI requirements for nutrients;"

*The total phosphorus allocations of the draft TMDL have been removed, and nutrient loads from nonpoint sources are no longer germane to the document.*

Comment, p. 2, "...existing Eagle and Nampa Fish Hatchery nutrient data and associated no net increase requirements;"

*The total phosphorus allocations of the draft TMDL have been removed, and nutrient loads from nonpoint sources are no longer germane to the document.*

Comment, p. 2, The City requests a more robust discussion of options that are available for meeting TMDL goals.

*The discussion of ways in which the TMDL goals can be achieved will be developed in the implementation plan, which will follow the approval of the TMDL.*

Comment, p. 3, "Identification of the significant stakeholder and public involvement in the development of the draft lower Boise TMDL;"

*DEQ recognizes the tremendous number of hours given by all of the stakeholders,*



*advisory group members, cooperating agencies, and members of the public in the TMDL development process. The development of an accurate, thorough, and effective TMDL would not have been possible without the assistance of all of the people who have been involved. DEQ staff are especially appreciative of the thoughtful technical, policy, and "on the ground" information provided all of the people involved in TMDL development.*

Comment, p. 3, Discuss the elements of the implementation plan in the TMDL document.

*All implementation planning will be developed separately from the TMDL document, which remains focused on assessment, analysis, and allocation.*

Comment, p. 3, Clarify that the proposed no net increase approach for nutrients is not a TMDL.

*The total phosphorus load allocations have been removed from the Boise TMDL, and will be replaced by an application of the "no net increase" rule specified in the State of Idaho Water Quality and Waste Water Treatment Requirements rules, IDAPA 16.01.02.054.04 and .05 TMDLs for nutrients in the lower Boise River will be developed concurrently with the lower Snake River and Brownlee Reservoir TMDLs.*

Comment, p. 3, Clarify the language related to the need for additional point source controls contained within the reasonable assurance section of the Draft TMDL on page 54.

*The language included on page 54 of the Draft TMDL is based upon United States Environmental Protection Agency, Guidance for Water Quality Based Decisions: The TMDL Process, EPA 440/4-91-001, page 24, "State or Local Process for Nonpoint Sources".*

Comment, page 4, Specific Comment 1, "No Nutrient Water Quality Impairment, therefore No Nutrient TMDL is proposed or required."

*DEQ emphasizes the fact that although chlorophyll-a measurements from the water column of the Boise River are not indicative of excessive suspended algae growth, many of the periphyton (attached) algae growth measurements made at Middleton and Caldwell are greater than nuisance thresholds in literature. The periphytic algae measurements need to be evaluated further to determine whether or not they constitute an impairment to beneficial uses in the Boise River. The portion of the comment related to the development of a phosphorus TMDL is addressed by the fact that the total phosphorus allocations have been removed from the TMDL.*

Comment 1a., page 5, Eliminate no net increase checkpoints for total phosphorus.

*The total phosphorus allocations and checkpoints have been removed from the TMDL. DEQ will develop an appropriate application of the state's no net increase rule with respect to total phosphorus.*

Comment 1c., page 6, No Net Increase baseline determination.

*DEQ concurs with the City of Boise's statement on page 5 of the comment letter, "The spirit of the NNI policy is met with limitations on loadings to 1996 baseline levels." The baseline loads for treatment plants and tributaries developed as a part of the Draft TMDL are representative of 1996 conditions, and are entirely appropriate for an application of the state's no net increase rule. The 1996 baseline loads and the methodology used to develop them have been reviewed by stakeholders and have been available for a 60 day public comment period. DEQ considers the development of baseline total phosphorus loads complete and closed.*

Comment 1d., page 7, Undefined point source allocations

*DEQ agrees that point sources not identified in the Draft TMDL that may be sources of phosphorus should be included in the development of an application of the state's no net increase rule.*

Comment 1e., page 7, Innovative water quality mechanisms needed

*DEQ supports innovative ideas that can provide a least cost pathway to improve water quality in the Boise River and meet the goals of the TMDL. Detailed descriptions of innovative techniques, such as effluent trading, are best developed in the implementation plan for the TMDL, as well as in other stand alone documents.*

Comment 2, page 7 The right TMDL target is identified for the wrong reason. "Total phosphorus is identified as the appropriate form of phosphorus for a nutrient TMDL target. However, the Draft TMDL states that total phosphorus is important 'since total phosphorus has the best correlation with periphytic algae growth'." We feel that this is the wrong reason..."

*DEQ refers the City to the response provided for Specific Comment 1, from page 4, in which the periphytic algae data from selected sites and sampling runs in the Boise are noted to be greater than literature thresholds for nuisance aquatic growth.*

Comment, Specific Comment 3, No dissolved oxygen impairments

*Noted.*



Comment, Specific Comment 4, Brownlee and Lower Snake River TMDLs. "Future development of TMDLs for nutrients in Brownlee Reservoir and the lower Snake River may require reductions in phosphorus loads from upstream tributaries, including the Lower Boise River."

*Noted, DEQ concurs.*

Comment, Specific Comment 5, Scientific basis for TMDLs must be sound. The City of Boise expresses concern that the standards and protocols for data collection by the Idaho Power Company have not been fully evaluated. The City suggests that the validity and accuracy of the data used for TMDL development need to be assured.

*DEQ agrees that data need to be valid and accurate. The water quality data collected by the Idaho Power Company that have been available for review by the public through technical presentations are collected using well established and appropriate methodologies. Idaho Power data collected on the lower Snake River and Brownlee Reservoir, again as presented to public forums such as the lower Boise River Technical Committee, are analyzed by established, reputable laboratories.*

Comment, Specific Comment 6, page 9, More data and analysis required

*DEQ agrees that additional data and analyses may be needed to develop phosphorus TMDLs on the lower Snake River and Brownlee Reservoir, and notes that those items are beyond the scope of the Boise River TMDL document. DEQ notes that the City is incorrect in its suggestion that phosphorus load allocations presented in the Draft TMDL were based upon 1992 flows and 1996 water quality data. In fact, total phosphorus wasteload allocations were based entirely upon 1996 flows and water quality data, as appropriate for establishing 1996 baseline for treatment plants. Tributary load allocations used 1996 flow data, and established phosphorus models based on the available record of total phosphorus measurements (since the operational changes common to treatment plants are not applicable to the tributaries).*

Comment, Specific Comment 7, page 9, Numeric phosphorus targets or criteria.

*The total phosphorus concentrations presented in the EPA Gold Book for flowing waters and flowing waters entering lakes or reservoirs are guidelines, and the TMDL will reference those values as such.*

Comment, Specific Comment 8, page 10, Clarify discussion on nutrients and nuisance aquatic algal growth.

*The descriptions of nutrients and nuisance aquatic growth in the TMDL are descriptive and appropriate for the document.*

Comment, Specific Comment 9, page 11, Stakeholder Involvement

*Noted. Again, DEQ expresses appreciation to the tremendous number of hours of service provided by all of the stakeholders involved in the TMDL development process.*

Comment, Specific Comment 10, page 11, Implementation

*Implementation issues will be fully described and developed in the implementation plan that will follow the approval of the lower Boise River TMDL.*

Comment, Specific Comment 11, page 12, Reasonable Assurance

*The language included on page 54 of the Draft TMDL is based upon United States Environmental Protection Agency, Guidance for Water Quality Based Decisions: The TMDL Process, EPA 440/4-91-001, page 24, "State or Local Process for Nonpoint Sources".*

Comment, Specific Comment 12, page 13, Temperature TMDL "The Draft TMDL contains a "TMDL" for temperature.

*The Draft TMDL does not develop load or waste load allocations for temperature, and thus is clearly not a TMDL for temperature. DEQ notes that the last bullet under general comment 2 on page 2 of the Boise City comments correctly states "No TMDL for nutrients and temperature" (emphasis added).*

Comment, Specific Comment 13, page 13, Other Stressors

*DEQ encourages voluntary, innovative actions that can provide improvements to the available habitat for aquatic biota in the Boise River. Habitat improvements can be developed outside of the TMDL document in the implementation planning process. In regard to the suggestion that such activities should be credited to offset other pollutants, DEQ does not believe that a habitat improvement can be used to offset water quality based pollutant limitations required by NPDES permits, waste load allocations, or load allocations.*

Comment, Specific Comment 14, page 13, Status of Aquatic Life Uses in the Lower Boise River "The table contains an "existing use" column that suggest cold water biota and salmonid spawning are "existing uses" from Lucky Peak Dam to the Snake River..."



*DEQ reiterates that cold water biota and salmonid spawning uses are existing uses in the lower Boise River from Lucky Peak to the mouth of the Boise River. Fish sampled by the US Geological Survey and the Idaho Department of Fish and Game clearly show that salmonids such as brown trout and rainbow trout inhabit the Boise River from Lucky Peak Dam to Star Diversion. Another salmonid, mountain whitefish clearly maintains naturally reproduced populations throughout the river from Lucky Peak to the Snake River.*

Comment, Specific Comment 15, page 14, Municipal Access to Sediment “Reserve for Growth Allocation. “The city strongly supports the proposed approach concerning access to the 20 year TSS ‘reserve for growth’ for municipalities.”

*Noted.*